

**REMARKS****OVERVIEW**

Claims 1-3, 9-12, 16-18, 20, 22-25 and 30 are pending in this application. Claims 1, 9, 18, and 30 have been amended. The present response is an earnest effort to place all claims in proper form for immediate allowance. Reconsideration and passage to issuance is therefore respectfully requested.

**ISSUES UNDER 35 U.S.C. § 103(a)**

The Examiner has rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over JP 6283301 in view of Chiang 99/53505. This rejection is respectfully traversed. As the Examiner recognizes, JP '301 does not disclose the nickel barrier, bonding without adhesives, and frit encapsulant (Office Action, page 2, numbered paragraph 2). It is observed that JP '301 discloses use of a lead frame to hold multiple component parts that are joined with adhesives.

Chiang discloses a circuit protection device formed of stacked members. Neither device is a power chip resistor of claim 1. To further make clear that claim 1 is referring to a power chip resistor, claim 1 has been amended to add the limitation of "whereby the first and second nickel barrier plating used to connect the end caps and the encapsulant provide long-term mechanical stability and resistance to resistive heating." It is respectfully submitted that the addition of such a limitation does not require additional searching as these advantages have either been previously discussed in responses or are related to the invention being a "power chip resistor" and the Examiner has already had multiple opportunities to search for the closest prior art relative to a power chip resistor.

It is observed that the use of solder to connect the resistors instead of a metal barrier plating would not provide these advantages as is made clear on page 2 of the specification as originally filed, first full paragraph that discloses that in the prior art stacked power chip resistors, the solder is susceptible to melting. Therefore, the use of solder to connect chip resistors does not provide this mechanical stability and resistance to resistive heating of the present invention. The machine translation of JP '301 indicates at paragraph [0009] that solder is used to plate the electrodes and at paragraph [0010] indicates that the electrodes are soldered to the lead frames. Thus although JP '301's lead frames provide "mechanical connection of sorts, JP '301's lead frames do not provide the same advantages achieved by the present invention as JP '301's solder connections make it susceptible to resistive heating and loss of mechanical stability and therefore inappropriate for use as a stacked power chip resistor. Thus JP '301, because it is not directed to the context of a power chip resistor, it is not concerned with the same problems as the Applicant's invention of claim 1 and would not provide the mechanical stability and resistance to resistive heating as required by claim 1.

Chiang, on the other hand, does not disclose the use of the "nickel barrier plating" of claim 1 to connect separate end caps. Therefore, neither reference relied upon by the Examiner, alone or in combination discloses each and every limitation of claim 1. Also, although both references are directed towards stacking, neither reference is directed towards the stacking of resistors to create a power chip resistor and therefore is not concerned with solving the problems of maintaining long-term mechanical stability and resistance to resistive heating. Therefore this rejection to claim 1 must be withdrawn.

Claims 1-3, 9-12, 16-18, 20, 22, 24-25 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '301 in view of Chiang and further in view of Hashimoto.

The deficiencies of JP '301 and Chiang have already been discussed. Hashimoto does not remedy these deficiencies as Hashimoto is not directed towards a power chip resistor that provides the advantages of providing "long-term mechanical stability and resistance to resistive heating" of the power chip resistor of the present invention.

Therefore it is respectfully submitted that these rejections must be withdrawn and the Examiner should find claims 1-3, 9-12, 16-18, 20, 22, 24-25 and 30 to be allowable.

Claim 23 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '301 in view of Chiang and Hashimoto, further in view of Nakamura. The Examiner relies upon Nakamura to disclose the use of silver palladium. The deficiencies of JP '301, Chiang, and Hashimoto as applied previously have already been discussed. As claim 23 depends from claim 18, and Hashimoto does not remedy the deficiencies of the other references with respect to structure that provides advantage of "long-term mechanical stability and resistance to resistive heating" it is respectfully submitted that this rejection must also be withdrawn.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

John D. Goodhue

JOHNN D. GOODHUE, Reg. No. 47,603  
McKEE, VOORHEES & SEASE, P.L.C.  
801 Grand Avenue, Suite 3200  
Des Moines, Iowa 50309-2721  
Phone No: (515) 288-3667  
Fax No: (515) 288-1338  
**CUSTOMER NO: 22885**  
Attorneys of Record

-pw-

10/12/04 TUE 07:57 FAX 5152881338  
09/10/04 FRI 18:17 FAX 5152881338

MCKEE VOORHEES & SEASE  
MCKEE VOORHEES & SEASE

015  
001

\*\*\*\*\*  
\*\*\* TX REPORT \*\*\*  
\*\*\*\*\*

TRANSMISSION OK

TX/RX NO 2993  
CONNECTION TEL 17038729308  
SUBADDRESS  
CONNECTION ID  
ST. TIME 09/10 16:13  
USAGE T 03'17  
PGS. 11  
RESULT OK

**MCKEE VOORHEES & SEASE, PLC**  
~~MCKEE VOORHEES & SEASE, PLC~~

ATTORNEYS AT LAW

801 GRAND AVENUE • SUITE 3200 • DES MOINES, IA 50309-2721  
PHONE: 515-288-3667 • FAX: 515-288-1338 • www.lpmvs.com

DATE: September 9, 2004

TO: Art Unit 2832

COMPANY: USPTO

PHONE:

FAX: 703-872-9306

FROM: JOHN D. GOODHUE

NUMBER OF PAGES (Including cover): 11

Please file the attached AMENDMENT AFTER FINAL:

APPLICANT : HUBER, Louis P. et al.  
SERIAL NO : 09/811,844  
FILED : March 19, 2001  
TITLE : POWER CHIP RESISTOR

Grp./A.U. : 2832  
Examiner : EASTHOLM, Karl D.  
Conf. No. : 9248  
Docket No. : P04870US0